

## ABSTRACT FORM FOR ALL GSA MEETINGS IN 1988

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1 TYPE ABSTRACT <sup>Public Reading</sup> within blue lines (they're absolute! Mail flat, reinforced.)U. S. Department of Energy  
Nuclear Operations Office

No 3532.

2

SIGNIFICANCE OF THE DISTRIBUTION OF DINOFLAGELLATE ASSEMBLAGES IN THE TYPE ELLENTON FORMATION, SAVANNAH RIVER PLANT: AGE, ENVIRONMENT, OR BOTH?

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Both. Assemblages of dinoflagellates from the Paleocene Ellenton Formation (type locality, Savannah River Plant) change systematically with depth in a pattern which can be detected in several cores from Savannah River Plant. The change appears to be partly due to the passage of time, as some species which characterize the upper part of the Ellenton are typical of assemblages of early late Paleocene (Sabinian) age, whereas some species which characterize the lower Ellenton are more typical of assemblages of late Early Paleocene (Midwayan) age.

A strong impression of environmental control is also present in that some assemblages are strongly dominated by a few species which are associated with restricted environments, whereas others show more diversity. Barren intervals in the cores complicate the analysis.

Tentative criteria for chronology of the Ellenton are presented, and compared to reference sections in Alabama.

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